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l'Homme; in 1870, lastly, *L'Anthropométrie, ou Mesure des différentes Facultés de l'Homme*. This did not include all the task that Quetelet imposed upon himself, and if death had not overtaken him, he would have completed the series by a new edition of his *Physique du Globe*, published in 1861, and by a treatise on Astronomy.

We will not endeavour to enumerate the learned societies of which Quetelet was a member; the list would be too long. He was elected an Associate of the Royal Astronomical Society on January 11, 1828.

Notwithstanding the numerous occupations which claimed every moment of his time, Quetelet was of easy access, and always gave the kindest reception to those who wished to speak with him on subjects connected with his studies. He could discern and would encourage merit, and many learned men will remember the support they received from him in the commencement of their career; so that he has left behind him deep regrets as well as feelings of profound gratitude.

He died on February 17, 1874, and Belgium deplored its greatest scientific luminary.*

Mr. John Williams, the late Assistant Secretary of the Royal Astronomical Society, was the only child of a partner in a prosperous manufacturing firm in the City. He was born in London on October 19, 1797, and was sent at an early age to the Charter House School, where, as a quiet and studious boy, he soon became a favourite with the masters. It is recollected of him that he had read through Rapin's History of England before he was eight years of age.

Just as he was entering into manhood his father died, and the business having declined, he was compelled to turn the education he had received to account by setting up a small school; and he shortly afterwards married the excellent wife to whose energy and careful management he frequently acknowledged that he owed much during this straitened period of his life.

The income from his school being very uncertain, he was glad, after a few years, to accept an appointment to the mastership of the parochial school in Spitalfields, which produced him a small, but regular salary.

In 1822, then in his 25th year, he became a member of the Spitalfields Mathematical Society, a venerable institution which dated from the time of Newton. During the last century, and perhaps during the first decade of this, the Society had been principally supported by weavers and dyers, who met together on the Saturday evening in their aprons and working clothes, and devoted themselves for an hour to the solution of mathematical

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* The above, with the addition of a few details from the Memoir of M. Mailly, has been translated from a short life of M. Quetelet, by Dr. Terby, of Louvain.

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problems. Each man had his slate, and from eight to nine silence was preserved; at nine o'clock, according to their rules, which are still preserved in the library of our Society, refreshment was to be brought in, and the rest of the evening was to be passed in mutual instruction.

At the time when Mr. Williams joined the Society it had risen in the social scale; the nucleus of a library had been collected, and they rented a building, which had formerly been a French chapel, in Crispin Street, Spitalfields, the premises consisted of three rooms, one sufficiently large to hold about 500 people. Here popular lectures were given, and 6*d*. a-head was charged for admission; one of the smaller rooms was used for the library, and the other for storing the instruments belonging to the Society. After a year or so, Mr. Williams was appointed secretary, at a very small salary. In this capacity he frequently gave lectures, one of which, on mental arithmetic, was afterwards printed, and attracted considerable attention. He also lectured on electricity, botany, geology, numismatics, and on the art of making casts of coins, at which he was a great adept. He never lost an opportunity of taking an impression from rare gems or coins which came within his reach, and in the course of his long lifetime he made a collection of some fifty thousand casts. The earlier of these are neatly executed, either in plaster of Paris or sulphur; but when electrotyping was invented, he speedily made himself a master of the art and produced thousands of copies in copper; many of them are remarkable for the beauty of their finish. We may especially mention a collection of fac-similes of large Roman brass coins, which is bound in six volumes and was founded on the famous collection of Admiral Smyth. This he often thought of reproducing by photography for publication; but, owing probably to the death of Admiral Smyth, his idea was never carried out. The principal work of this period of his life was the study of Egyptian hieroglyphics. He found that the published copies of inscriptions were frequently not to be depended upon, and this led him to the invention of an improved method of *rubbing* or copying by mechanical means inscriptions on stone, for which he received the medal of the Society of Arts. He made a large collection of rubbings; and though it required many years, as he only had his half-holidays for the work, he eventually succeeded in copying all the inscriptions on the sarcophagi and statues in the British Museum and in Sir John Soane's collection, and also those in the Ashmolean Museum at Oxford. These copies are still in existence and form a very valuable collection. His Egyptian studies led to the publication by subscription, in 1836, of his first book, *An Essay on the Egyptian Hieroglyphics*, which was the means of introducing him to Dr. Lee.

About 1840 the Mathematical Society began to decline. Many of its members left it to join the newly formed Chemical Society, the lectures dropped off, and the funds of the institution became insufficient to pay the rent of the Crispin Street building; they

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therefore moved to Devonshire Street, Bishopsgate; and, in the year 1846, the Society having dwindled down to about twenty members, they gave over their library, which consisted of some three thousand volumes, to the Royal Astronomical Society. In return for this gift the then members of the Mathematical Society were elected Life Fellows of our Society, the compounding fee being remitted.

A few months after this amalgamation, Mr. Harris, the former Assistant Secretary of the Royal Astronomical Society, having died, Mr. Williams was appointed in his place.

From hieroglyphics Mr. Williams turned his attention, when he was above fifty years of age, to the study of Chinese, and after some years he succeeded in making himself master of much of their historical literature. He arranged and catalogued the Morrison Library of Chinese works for University College, and wrote several small papers on the Chinese accounts of early eclipses, and on their records of Sun-spots observed with the naked eye, which were published in the *Monthly Notices*.

But his principal work was on the Chinese observations of comets from B.C. 611 to A.D. 1640. The observations are principally extracted from the Encyclopædia of *Ma Twan Lin* and from a great historical work called the *She Ke*. It was necessary, in order to compare the dates of these observations with our own records, to construct a complete set of chronological tables, giving the succession of the dynasties and emperors from the earliest recorded times, and also tables for finding the moons and days at the different periods. Besides this, it was necessary to form a complete Chinese Celestial Atlas, and to compare their constellations with our own. Both these undertakings, each of which may be regarded as a formidable work, he successfully accomplished, and the whole was published in 1871, partly at the expense of our Society. It forms a quarto volume of about 250 pages, with lithograph plates of the Chinese constellations, and a preface of some thirty pages, which contains an important though brief sketch of early Chinese astronomy. By this work he will be remembered, and it will doubtless long remain the chief book of reference on the subject.

Besides his knowledge of Chinese, he had a considerable acquaintance with Arabic and Hebrew, and at the recent Congress of Orientalists in London his name was placed upon their Council. He was also an enthusiastic archæologist, and was a Fellow of the Society of Antiquaries; and in addition to the duties connected with our Society, he for many years filled the office of Assistant Secretary to the Microscopical Society and was, during the first years of its existence, the acting secretary of the London Photographic Society.

He was a great reader, and generally had four or five books in hand at the same time; and he never required to use a marker or to turn down a leaf, but could always find his place at once. His power of abstraction was so great that he could study

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while talking was going on around him without being in the least interrupted.

He lived a quiet, happy life, always at work or reading; never idle, yet at all times willing to be interrupted for the business of the Society. He had a pleasant and obliging manner, was communicative and full of information on his favourite subjects.

His connection with the Royal Astronomical Society was a source of great pleasure to him, and he could not be persuaded to resign his post of Assistant Secretary even when he might well have done so, on the occasion of the removal of the Society from Somerset House.

The work involved in the removal of the library and the fatigue consequent upon it were very great; but he appeared to have accomplished it satisfactorily, and was settling down in his new home when the sudden loss of his wife, after a union of fifty-two years, was too much for him to bear.

Mrs. Williams died, very unexpectedly, on November 10, the Tuesday before the first meeting of the Society in Burlington House. The excitement of the week served as a stimulus which kept him up till after the funeral, but he then rapidly collapsed, and died, after three weeks of suffering, on the 3rd of December 1874, in the 78th year of his age. He was buried with his wife in Highgate Cemetery.